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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/686,191 | 10/15/2003 | David L. Hagen | P/3474-86 | 3800 |

2352 7590 08/10/2007
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1180 AVENUE OF THE AMERICAS
NEW YORK, NY 100368403

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| EXAMINER |
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SOOHOO, TONY GLEN

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| ART UNIT | PAPER NUMBER |
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1723

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| MAIL DATE | DELIVERY MODE |
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08/10/2007 PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/686,191 | HAGEN ET AL. | |
| | Examiner | Art Unit | |
| | Tony G. Soohoo | 1723 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 03 July 2007.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 56-95 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) _____ is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) 56-95 are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date. _____
3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ 5) Notice of Informal Patent Application
6) Other: _____

DETAILED ACTION

1. The amended application has been transferred to class 366 Agitation for appropriate examination of the newly presented claims.
2. Applicant has cancelled all the claims subject to the restriction made in the previous office action of 05/03/2007, and has presented new claims 56-95 to a mixer and mixer method. The new invention of mixer claims are subject to a new restriction requirement.

Also, it is acknowledged that applicant has identified the provisional election of five different of features sub-species for examination of the invention. The elected subspecies configuration combination of features of the invention are species shown in figure 1, 2, 10, 29, and 34.

Election/Restrictions

3. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 56-83, drawn to a mixing apparatus, classified in class 366, subclass 173.1.
 - II. Claims 84-95, drawn to a pressure/flow rate controlled method of mixing and/or evaporator and/or temperature control method, classified in class 366, subclass 182.1, or class 261 subclass 127 or class 62 subclass 121.

The inventions are distinct, each from the other because of the following reasons:

4. Inventions Group II and Group I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as

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claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus may be practiced without a control of the delivery pressure or flow rate of the 1st fluid in the fluid contactor.

5. Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.

6. Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.

7. This application contains claims directed to the following patentably distinct species:

The invention has different sub-species of an invention

Subspecies a1: a multiple fluid mixer device/method (57-59, 63-89, 92-94)

Subspecies b1: a fluid evaporation device/method (claim 60-62, 90-91, 95)

Subspecies c1: a fluid temperature control device/method (claim 94, 95)

Independent Claims 56 and Claim 84 are linking claims to the subspecies a1, b1 and c1 and will be examined together with the elected subspecies

Also, the invention has different sub-species of the features of modifying the fluid contactor and flow field of

Subspecies a2: the use of a vibration generator (claims 63-65)

Subspecies b2: the use of an high voltage power supply (claims 65-68)

8. Applicant is required to elect one of claimed subspecies of a1, or b2, or c1.

If applicant elects the apparatus claims group I, applicant is required to elected one of the modified contactor of subspecies a2, or b2.

9. The species are independent or distinct because the recited subspecies features have different effects and operate in a different manner.

The examiner is willing to review the sub-species election requirement upon an admission upon the record, and/or evidence that the outlined subspecies features are obvious over one another.

10. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, at least the independent claims 56 and 84 are generic.

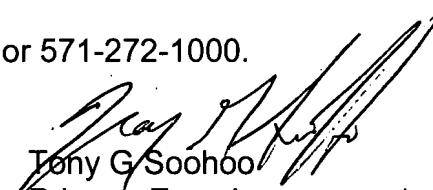
Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony G. Soohoo whose telephone number is (571) 272 1147. The examiner can normally be reached on 8AM-5PM,Tue-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Sample can be reached on 571-272-1376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Tony G. Soohoo
Primary Examiner
Art Unit 1723
